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POISONOUS SNAKES of EUROPE, AFRICA and NEAR EAST

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SOME FACTS ABOUT POISONOUS SNAKES

Almost everyone is afraid of snakes. Even the harmless kinds are regarded with loathing and often with terror. Fear of snakes is caused partly by our unfamiliarity with them but mostly as the result of a lot of nonsensical fiction and misinformation.

No one expects you to love snakes. It is a good idea to leave them alone. But there is no need for you to fear snakes once you know something about them, their habits, how to identify the dangerous kinds, the simple precautions to take to prevent snakebite and the first aid measures to use in the very rare emergency of being bitten.

Actually, the chances of being bitten by a poisonous snake are very small. For example, deaths from lightning in the United States amount to almost three times the deaths caused by snakebite. In Australia, where there are many kinds of poisonous snakes, the death rate from snakebite averages only 12 persons per year out of a population of 6,500,000. The danger of death from snakebite is considerably less than the possibility of being killed in a jeep wreck or getting shot by accident.

You can dismiss as exaggerations most of the popular literature you've read and the stories you've heard about snakes. Don't believe all the hair-raising tales about the number, size and ferocity of the local snakes in the area where you are based. Natives know all the poisonous kinds but, in addition, they will tell you that many harmless species are deadly. For example, in the United States, the common little puff adder is considered almost universally to be dangerous. This is nonsense; the puff adder is non-poisonous and will hardly ever bite.

Statistics on the number of people bitten by poisonous snakes are unreliable. This is especially true in the wilder areas where dangerous snakes are most numerous. Furthermore, the fatalities are almost always among people who go about barefoot and get bitten on the feet or ankles. For a soldier wearing shoes and leggings, living in a camp where any snake that is seen is promptly killed, the danger of being bitten by a poisonous snake is small compared to the hazards of malaria, cholera, dysentery or other diseases. Mosquitoes are a thousand times more dangerous than snakes.

Soldiers living in camps and barracks, even where snakes are relatively plentiful, may seldom see one. Men working or fighting in the jungle may see them occasionally. Those engaged in clearing ground, cutting grass or jungle, or digging up soil may see a good many snakes, but the chances of getting bitten by a poisonous kind are very small.

There are many reasons why snakes are a minor hazard. First of all, most snakes are harmless. Then, too, snakes are not numerous. Because all snakes feed on other animals, such as rats, rabbits or birds, each snake must have a fairly large area for his hunting ground in order to find enough food. This limits the number of snakes. Furthermore, the danger from most of the few poisonous kinds of snakes is much overrated. It depends mainly on the size

of the snake. Usually, only a large specimen, over two feet long, is really dangerous to a grown man, and these large extremely dangerous snakes are not common. The bite of the smaller snakes is not likely to be fatal.

In addition, nearly all snakes avoid man if possible. It is reported that the king cobra of Southeast Asia, the bushmaster and the tropical rattlesnake of South America, and the mamba of Africa sometimes aggressively attack man, but even these snakes do so only occasionally. Most snakes get out of the way (some of them do it slowly) and seldom are seen.

The distance at which a snake may bite has often been exaggerated. This striking distance seldom is more than half the snake's length; in the large snakes, about a third of the length, and in some snakes, even less. However, some of the small vipers have been known to strike their full length. The distance a cobra can strike is easy to judge since the part raised is never bent into deceptive S-curves but merely is jabbed forward and downward; commonly the distance is almost one foot; in a 12-foot king cobra the striking distance may be as much as 3 feet. Generally, you must be at least within a long step of even a large snake before he can bite you; a normally alert person will be able to see the snake before he gets within striking range. Most bites occur when a snake is stepped on by accident.

All these facts do not mean that no soldier is going to be bitten or that poisonous snakes are harmless creatures which will make fine pets. It is stupid and highly dangerous for an inexperienced person to pick up a snake unless he is positive the snake is harmless.

No man need fear snakes who knows these facts about them. You can minimize the possibility of being bitten by keeping your eyes open, by keeping your hands off *all* snakes, by learning how to identify the dangerous kinds in your own local area, by following the simple precautions for avoiding snakes, and by knowing what to do in the very rare event you are bitten.

Identification of Kinds of Poisonous Snakes

It is not easy to identify a poisonous snake. There is *no single* characteristic which distinguishes a poisonous snake from a harmless one except the presence of poison fangs and glands. You can determine the presence of these parts without danger only in dead specimens, and even then the fangs may be hard to find.

The notion that all poisonous snakes have lance-shaped or triangular heads or some other warning feature is wrong and dangerous. While it is true that many dangerous snakes do have a lance-shaped head, many do not.

The only sure way to identify dangerous snakes is to learn to know and recognize the poisonous kinds on sight in the particular area in which you happen to be based. The inside of this bulletin illustrates and describes the important kinds found in your area. In any given locality you are not likely to see more than one or two kinds and you can learn to identify them further by studying dead specimens. The ability to distinguish a poisonous snake from a harmless one will minimize the danger of snakebite and help to eliminate fear.

About Pythons

Although they are not poisonous, it is worth knowing some facts about pythons, boas and other constrictors. Some of these are large snakes which may grow to 25 feet in length. In spite of the many hair-raising tales concerning these reptiles, they are timid and rarely, if ever, attack man. Boas are found in the American tropics; pythons occur in the tropics of Africa and Asia. They sometimes attack small children but will not deliberately tackle anything that is too big to swallow. A man is too big for even the largest python. If caught or cornered, these snakes may fight back by wrapping their coils around the attacker. If left alone, they are about as dangerous as a collie dog.

DISTRIBUTION OF POISONOUS SNAKES OF EUROPE, AFRICA AND THE NEAR EAST



EUROPE, WEST OF THE VOLGA: *Vipers are the only poisonous snakes found. There are no snakes in Ireland.*

NEAR EAST AND AFRICA (North of 20° North): *Cobras and vipers are found in this area.*

AFRICA (South of 20° North): *Cobras, vipers, mambas and coral snakes are found in this area. There are sea snakes on the east coast of Africa and in the Persian Gulf. There are no poisonous snakes on Madagascar.*

Precautions Against Snakebite

Always wear shoes and leggings or high boots in areas where snakes are common—most snakebites occur below the knee.

Don't walk around barefoot, especially at night.

Don't poke your hands into holes in the ground. Wear gloves and take special care when clearing ground or brush. Watch where you put your hands in rocky places or on stone walls. Look before you touch—many snakebites occur on the hands.

Don't handle a live snake or play with it unless you are absolutely certain the snake is harmless. It takes an expert to handle a dangerous snake. You flirt with death when you pick up an unknown snake.

Keep your eyes open—develop "snake sense". You must be within a long step of even the largest snake before it can bite you. Alertness pays off in safety.

FIRST AID FOR SNAKEBITE

The first problem in treating snakebite is to determine whether it has been caused by a poisonous snake. Many harmless snakes will bite in self-defense. The only reliable way to tell whether the snakebite is poisonous is to identify the snake. However, the wound itself may give some clues.

One good indication of the bite of a poisonous snake is the intense pain which results almost immediately. A severe bite from a harmless snake will hurt no more than a wound made with any sharp instrument. The bite of a viper will cause immediate swelling. A cobra bite may have no local symptoms except for an intense burning pain in the area of the wound.

The appearance of the wound gives additional clues. Vipers do not really "bite". They stab with their fangs. The wound usually consists of two small punctures, generally half an inch or more apart. Sometimes there may be only one puncture if the snake partially misses or has one fang missing. Coral snakes, cobras, mambas and kraits often hang on and chew; the result may be one, two or more puncture marks. Harmless snakes usually have several teeth so that a bite may consist of several punctures formed in a semi-circle. However, it is not always easy to distinguish for certain between the bites of a harmless and a poisonous snake.

If you are bitten by a harmless snake, treat with iodine as an ordinary wound. If the bite is identified as that of a poisonous snake and you can get to a medical officer in a few minutes, apply a tourniquet and let the medical officer administer first aid. If no expert medical aid is available, undertake the following first aid measures immediately—*speed is essential.*

* * *

Place a tourniquet tightly above the bite. Loosen the tourniquet every 15 minutes for one minute at a time.

* * *

Wipe the skin around the bite free of dripped venom. Sterilize skin with antiseptic, such as tincture of iodine.

* * *

Sterilize a sharp knife or razor blade by holding it in the flame of a match or wiping with iodine. Make an x-cut through each fang mark; in fleshy tissue, make each cut about $\frac{1}{2}$ inch long and $\frac{1}{4}$ inch deep; in thin tissue over bones make shallow cuts parallel to bone. Be careful not to cut large blood vessels, tendons or nerves.

* * *

Suck the venom out of the wound. Use a snakebite pump, if available, or cup the mouth of a heated bottle over the wound. If no equipment is available, suck with the mouth through a rubber tissue laid over the bite or suck with the mouth directly on the bite—be sure to spit out the venom and rinse out the mouth periodically. The venom will do no harm unless there are sores in the mouth. Keep up the suction until the swelling ceases to progress.

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If possible, kill the snake and take it to the medical officer so that he can tell what kind of antivenin to use.

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Give morphine to relieve pain. Don't give alcohol under any circumstances.

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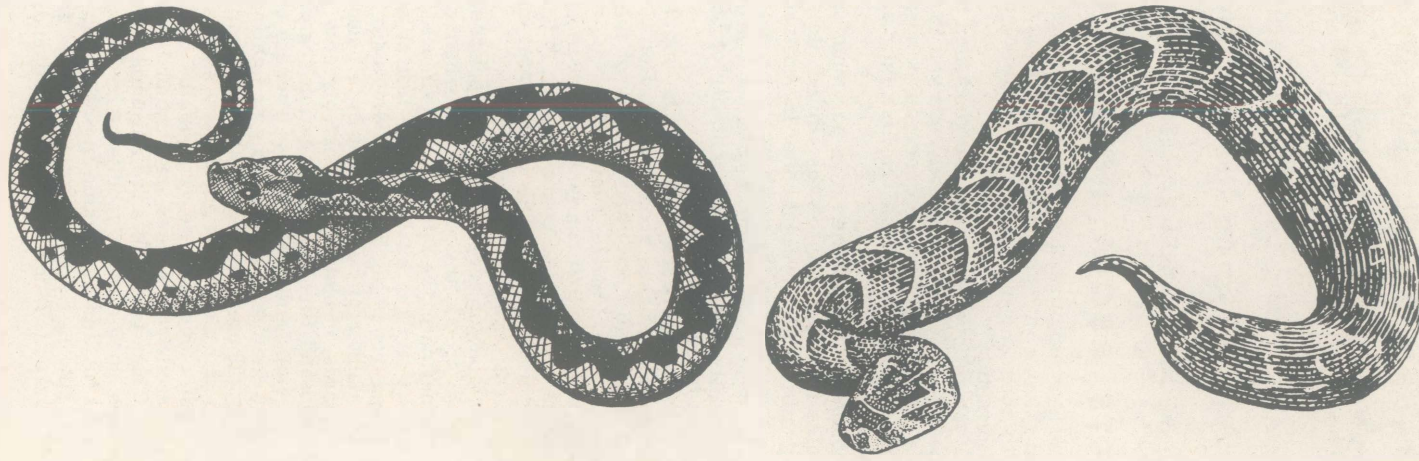
Don't put anything into the wound. Potassium permanganate or other chemicals do more harm than good.

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Carry the victim to a medical officer. Don't let him run or even walk.

THE POISONOUS SNAKES OF EUROPE, AFRICA AND NEAR EAST

IDENTIFICATION AND HABITS

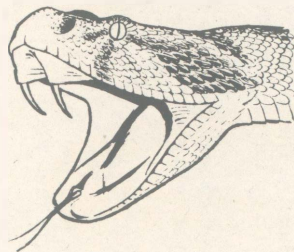


EUROPEAN VIPERS

Description: These snakes have a short thick body and a wide head which is much broader than the neck. Usually there is a zig-zag stripe down the back; colors may be gray, olive-brown, reddish or yellowish. The European viper averages from 2 to 3 feet in length. There are 8 species on the European continent; these snakes sometimes are known also as adders or asps.

Habits: Vipers generally are found in the wilder areas, particularly in rocky places, such as in the Pyrenees, the Appenines and in the Balkan mountains, where they may be found up to 5,000 feet. They occur as far north as 67° in Scandinavia and across Siberia. Sunlit slopes, moors and heaths, grain fields and trash piles are favorite prowling places. Some of the European vipers are aggressive and savage, causing occasional deaths.

POSITIVE IDENTIFICATION OF VIPERS



Vipers have two long and distinctive fangs in the upper jaw; none of the other teeth are comparable in size. Fangs may be covered with a curtain of flesh or folded back in the mouth.



CORAL SNAKES

Description: These small snakes (average under 24 inches long) have brightly colored bands across the back which generally do not extend across the belly. Some of the smaller kinds have a reddish or bright orange stripe along the back.

Habits: Coral snakes are secretive and inoffensive; they seldom are seen. These snakes hardly can be regarded as dangerous; they bite only if stepped on or picked up.

AFRICAN VIPERS

Description: The vipers of North Africa are similar to those of Europe, except for the puff adder (shown). This is a large brownish or sand-colored snake with striking markings, a heavy body and a very short tail. This snake grows to a length of 5 feet. Central Africa and South Africa have several additional kinds of vipers. Among the largest are the rhinoceros viper and the Gaboon viper. The rhinoceros viper, found in West Africa, has horns on its nose, a very wide head and a thick body covered with colored marks down the back; it reaches a maximum length of 4 feet. The Gaboon viper has one horn on the nose, a wide head and thick body with oblong markings on the back, and triangular colored spots on the sides; it has been known to reach a length of 6 feet. There are a number of other African vipers, most of them small; with the exception of one kind, they have a wide head and thick body.

Habits: The puff adder prefers open forests or grasslands near streams. The rhinoceros viper is found in or near streams. The Gaboon viper lives in heavy forests. The bite of any of these snakes is extremely dangerous, but they are not aggressive and not inclined to bite. The smaller vipers, found in sandy country, open brush, grassland or light forest are likely to be aggressive and dangerous in spite of their small size. One of the smaller kinds buries itself in the sand and may strike at a passing man; its presence is disclosed by a characteristic coiling pattern in the sand.

COBRAS

Description: There are several varieties of cobras in Africa and the Near East. The characteristic combat attitude is the simplest means of identification. In this posture, the forepart of the body is raised vertically and the head tilted sharply forward. Usually the neck is flattened out to form a hood; however, some kinds do not have a hood and others do not spread the hood unless they are extremely angry. The cobras of this area may be black, brown, gray or yellowish, and with or without markings. Cobras often are 6 to 7 feet long; one kind—the water cobra—may attain 8 feet.

Habits: The cobras of Africa and the Near East can be found almost anywhere. One kind lives in or near water; another may climb trees. Some of the cobras in this area are reported to be aggressive and savage. The fairly common Egyptian cobra (shown) of North Africa and adjacent regions, is found often around rocky places and ruins. The distance the cobra can strike in a forward direction is equal to the distance the head is raised above the ground. However, some cobras can spit venom a distance of 10 to 12 feet; this venom is harmless unless it gets into a man's eyes, in which case it may cause blindness if not washed out immediately. It is particularly dangerous to poke around in holes and rock piles because of the likelihood of encountering a spitting cobra.

MAMBAS

Description: These snakes are very slender and have small heads. They generally have a green or dark uniform color, without conspicuous spots or markings. The scales are smooth, symmetrical and large. Mambas attain lengths up to 12 feet. An 8-foot mamba is about half the thickness of an ordinary broomstick. It is difficult to identify mambas positively; the fangs in an 8-foot snake are only about ½-inch long, the thickness of a pin, and almost covered with flesh.

Habits: Mambas occur over all of Africa, except in the extreme northern portions. The South African mamba ranges from Tanganyika to West Africa south of the Congo and southward to Natal; it has two color phases—one black and one green. The green mamba (shown) is found in West Africa, from the Senegal to the Niger. Mambas live in trees or on the ground and have been known to enter houses in search of rats. They are very quick snakes. They may attack deliberately during their breeding season, but at other times they are timid and glide away. The bite of the mamba is very dangerous.

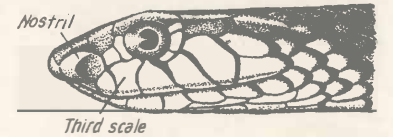
SEA SNAKES

Description: These snakes are found only in salt water. They occur on the east coast of Africa and in the Persian Gulf. Sea snakes of this area have a brown to black back with a yellow belly. They can be distinguished from eels by the fact that the snakes have scales and the eels do not. Sea snakes here are not more than 3 feet long.

Habits: These snakes are found in salt or brackish water on seacoasts. Their bites are dangerous but very rare. They have not been known to attack a man swimming.

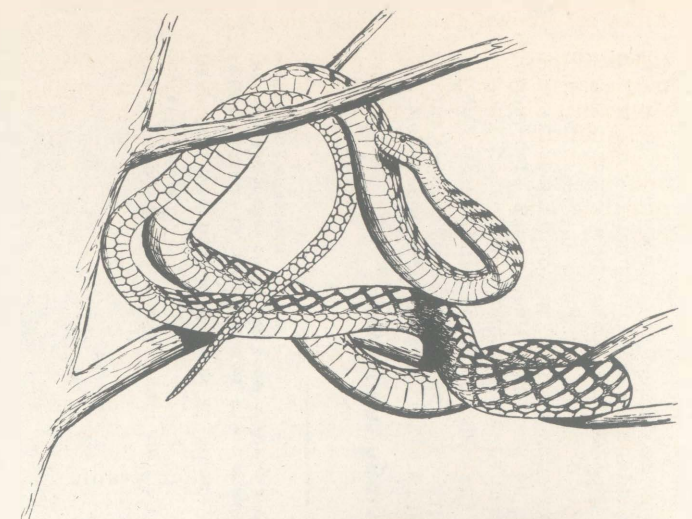
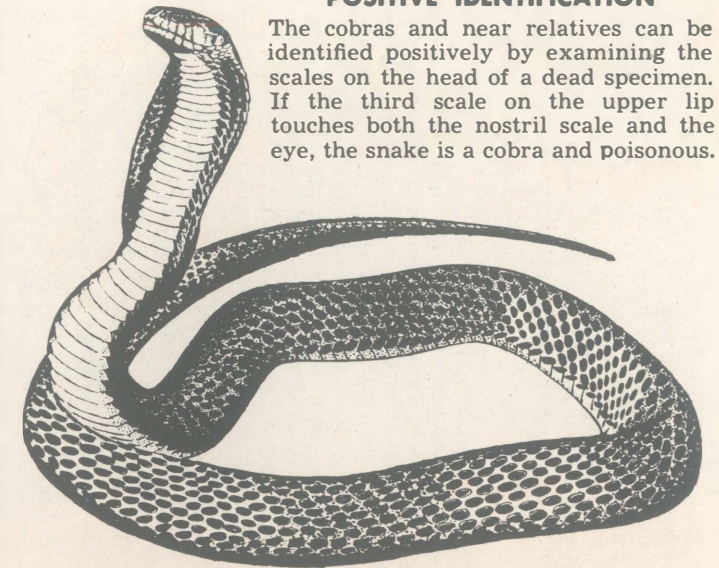
THE BOOMSLANG

This poisonous tree snake, which sometimes takes to the ground, is found in South Africa. The boomslang is slender; it may inflate the neck if disturbed; color is extremely variable, from black to green and speckled. Records of its bite are very rare; the snake is timid and not dangerous unless handled. (Not illustrated.)



POSITIVE IDENTIFICATION

The cobras and near relatives can be identified positively by examining the scales on the head of a dead specimen. If the third scale on the upper lip touches both the nostril scale and the eye, the snake is a cobra and poisonous.



SEA SNAKE

